

## CLAIMS:

1. A method of increasing boot-up speed in a computer system (10), comprising the steps of:
  - (a) arranging for the system (10) to include computing means (20) for processing data, and data storing means (60) coupled to the computing means (20) for providing data to  
5 and receiving data from the computing means (20), the storing means (60) being operable to write and/or read data in a plurality of spatially disposed regions of at least one data medium (200) thereof wherein access between the spatial regions is subject to one or more associated jump delays;
  - (b) arranging for the storing means (60) to including data caching means (320)  
10 therein for temporarily storing data read from and/or for writing data to said at least one data medium (200);
  - (c) on initial boot-up of the system (10), making at least one log of a temporal sequence in which one or more spatially disposed regions of the at least one data medium (200) are accessed; and
  - 15 (d) on one or more subsequent boot-ups of the system (10), using the at least one log to store data read from the at least one data medium (200) temporarily in the data caching means (310, 320) so as to provide for a more temporally efficient sequence of accessing the spatially disposed regions so as to speed up said one or more subsequent boot-ups.
- 20 2. A method according to Claim 1, further comprising a step of arranging for the system (10) to adopt an heuristic approach for accessing the spatially disposed regions when, on said one or more subsequent boot-ups, a sequence of accessing the spatially disposed regions instructed by the computing means digresses from that which is recorded in said at least one log.
- 25 3. A method according to Claim 1, wherein there are several logs corresponding to a plurality of temporal sequences, and the method includes a further step of arranging for the system (10) to switch between the logs depending upon which of the temporal sequences the system elects to adopt on boot-up.

4. A method according to Claim 3, wherein the system (10) is arranged to switch dynamically between the logs when executing boot-up.
5. A method according to Claim 1, wherein the storing means (60) is implemented as at least one hard disk drive (HDD) provided with associated local computing means (310) for implementing the data caching means (320), for supervising recording of the one or more logs and for executing their one or more sequences in response to boot-up of the system (10).
6. A computer system (10) arranged to provide a more rapid boot-up, wherein:
- (a) the system (10) includes computing means (20) for processing data, and data storing means (60) coupled to the computing means (20) for providing data to and receiving data from the computing means (20), the storing means (60) being operable to write and/or read data in a plurality of spatially disposed regions of at least one data medium (200) thereof wherein access between the spatial regions is subject to one or more associated jump delays;
  - (b) the storing means (60) includes data caching means (310, 320) therein for temporarily storing data read from and/or for writing data to said at least one data medium (200);
  - (c) the system (10) is operable on initial boot-up thereof to make at least one log of a temporal sequence in which one or more spatially disposed regions of the at least one data medium (200) are accessed; and
  - (d) the system (10) is operable, on one or more subsequent boot-ups thereof, to use the at least one log to store data read from the at least one data medium (200) temporarily in the data caching means (310, 320) so as to provide for a more temporally efficient sequence of accessing the spatially disposed regions so as to speed up said one or more subsequent boot-ups.
7. A system (10) according to Claim 6, wherein the system (10) is further operable to adopt an heuristic approach for accessing the spatially disposed regions when, on said one or more subsequent boot-ups, a sequence of accessing the spatially disposed regions instructed by the computing means (20) digresses from that which is recorded in said at least one log.

8. A system (10) according to Claim 6, arranged to record several logs corresponding to a plurality of temporal sequences, and arranged to switch between the logs depending upon which of the temporal sequences the system (10) elects to adopt on boot-up.
- 5 9. A system (10) according to Claim 8, arranged to switch dynamically between the logs when executing boot-up.
- 10 10. A system (10) according to Claim 6, wherein the storing means (60) is implemented as at least one hard disk drive (HDD) provided with associated local computing means (310) for implementing the data caching means (310, 320), for supervising recordation of the one or more logs and for executing their one or more sequences in response to boot-up of the system (20).
- 15 11. A hard disk drive (60) for use in a computer system (10) to provide a more rapid boot-up therein, wherein:
- (a) the system (10) includes computing means (20) for processing data, and the disk drive (60) coupled to the computing means (20) for providing data to and receiving data from the computing means (20), the disk drive (60) being operable to write and/or read data in a plurality of spatially disposed regions of at least one data medium (200) thereof wherein
- 20 access between the spatial regions is subject to one or more associated jump delays;
- (b) the disk drive (60) includes data caching means (310, 320) therein for temporarily storing data read from and/or for writing data to said at least one data medium (200);
- (c) the system (10) is operable on initial boot-up thereof to make at least one log
- 25 of a temporal sequence in which one or more spatially disposed regions of the at least one data medium (200) are accessed; and
- (d) the system (10) is operable, on one or more subsequent boot-ups thereof, to use the at least one log to store data read from the at least one data medium (200) temporarily in the data caching means (310, 320) so as to provide for a more temporally efficient
- 30 sequence of accessing the spatially disposed regions so as to speed up said one or more subsequent boot-ups.